

SWBAT: follow electrons as they move through common objects

Jan 4-7:20 AM

Welcome!!!

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SECA Physics
Friday 7 February 2014

* Pick up:

- slip of paper (for later)
- packet

Opening question:

What's a conductor and what's an insulator in this picture?

GROUND

AIR

BUSHES/TREE

METALS
WATER
WIRES
TOWERS

Centering

CLOUDS



Sep 7-7:04 AM

"Life is like a box of chocolates"

"There are plenty of fish in the sea."

The like / opposite "smell" analogy

Guys: don't like how other guys smell and try to move away
DO like how women smell and try to move closer

Women: don't like how other women smell and try to move away
DO like how guys smell and would move closer if they could but are stuck in their chairs

People are on little boats (?) surrounded by acid (?)

Grounding...

Electroscope animation

<http://www.regentsprep.org/Regents/physics/phys03/aeleclab/nerscope.htm>

Induction animation

<http://www.physicsclassroom.com/mmedia/estatics/isop.cfm>

Charge Polarization animation

http://photonicswiki.org/index.php?title=Polarization_and_Polarizability

Conductor /
Insulator

Feb 3-7:07 AM

Conservation of Charge

means that the total charge STAYS the SAME

Electrons are only **transferred**
you can't just get more charge from nothing

Three ways to "charge" something:

- Friction = rubbing
- Contact = transfer by touching (but no rubbing)
- Induction = electrons rearranging on a conductor because of nearby charges

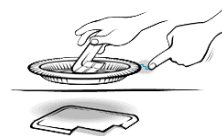
Feb 3-7:13 AM

Follow the electrons!

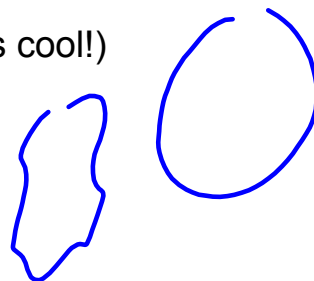
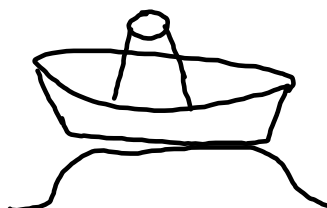
Work together at your table (2-3 people per group).

Need a Leyden jar for the third page.

Last page if you have extra time (but it's cool!)

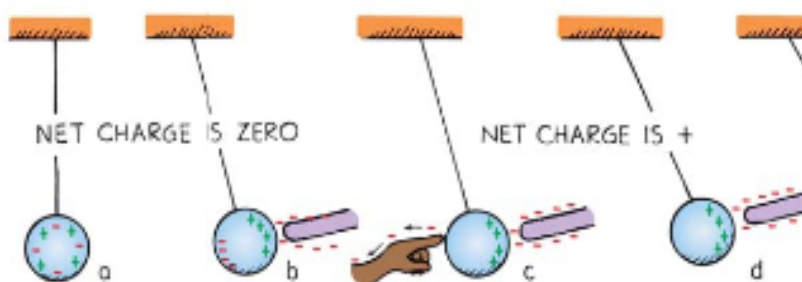


EXAMPLE
DRAWING

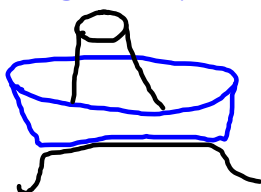


Feb 3-7:13 AM

Induced Charge!



Q3: Picture of charges on pie tin?



INDUCTION

Feb 9-7:44 AM

CP Hmwk: None

Daily 3 Questions

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your NAME!!!

Name	Period
1.	
2.	
3.	

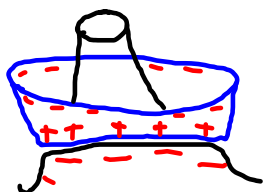
Sep 9-7:32 AM

1. Is styrofoam a conductor or insulator?

Insulator

2. Before we started the experiment, what charge did the pie tin have: positive, negative, or neutral?

Neutral

3. Which of the three kinds of charging are we seeing in this picture?

Induction

Jan 3-7:48 AM